

**PATENT APPLICANT**

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**TITLE OF INVENTION:** Professional Collaboration Networks

**CROSS REFERENCE TO RELATED APPLICATIONS:** US 60/450,682

**STATEMENT REGARDING**

**FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT:** Not Applicable

**REFERENCE TO A MICRO FICHE APPENDIX:** Not Applicable

**BACKGROUND OF INVENTION**

**FIELD OF INVENTION**

Generation of entities to create economic value as in corporations , represent the aggregation of complementary skills and visions that create products that are expected to have a value to a set of markets that is greater than the cost of the utilization of all of the constituent participants and the resources brought to bear on the products. In the past these entities were largely created by manual searches for suitable conadidates in each functional area dn industry area required for the product by entrepreneurs who used largely informal networks for this process.

The present invention creates a new paradigm for the creation of economic value generating entities by using Trust networks and Professional Networks. In many embodiments of the invention, these Trust and Professional networks are created by aspects of the invention.

**SUMMARY**

**OBJECTS & ADVANTAGES**

The objects and advantages of the present invention relate to the creation of entities that can generate economic value by utilizing the structure and content of communications among members of networks that are created both for social and professional interaction. Such economic value in the present invention may for example relate to the creation of business entities or a

1 new approach for matching job seekers to job offerings with information in normal interactions  
2 between members on one or more networks. The invention defines a new approach to creating the  
3 environment for such communications and also provides a process that uses existing networks as inputs  
4 for the process.

## 5 **BRIEF DESCRIPTION OF DRAWINGS**

6 Figures 1-35 provide slides that represent the process for building an exaple of the present  
7 invention.

## 10 **DETAILED DESCRIPTION OF INVENTION**

11 The present invention either uses a preexisting  
12 professional community or creates one or more such communities using the specialization and  
13 preferences of the members. Thses networks can result from professional organizations such as  
14 professional societies such as IEEE or Colleges and classmates in particular fields, Alumni of colleges,  
15 colleages in profitable organizations, university staff and faculty etc. This forms the professional layer of  
16 the communities. There is in addition a Trust layer of the community that is created by the interaction of  
17 members of one or more networks that relate to personal relationships from prior or current contact in  
18 organizationsor physical locations such as colleges, universities, alumni groups, companies, professional  
19 organiations, schools etc. The Trust Layer (TL) and the Professional Layer (PL) are parts of the  
20 Professional Colaboration Network (PCN)

21  
22 The classification of the members into functional areas relevant for economic  
23 activity and industry groupings relevant for creating economic value is done to help focus dialog in the  
24 professional networks. Similarly the Trust networks get focus by segmentation in to the relevant groups  
25 that are interested in a dialog. For example class groups in an alumni Egroup.

26  
27 The professional networks may have a range of classification mechanisms for the  
28 threads of discussion and dialog that flows through the network. One example would be an item for  
29 posting in the professional network be classified by the originator to have a components in one or more  
30 industry field and at least one functional area that is relevant for the posting. As responses are generated  
31 to the initial posting, respondents are allowed to provide new combinations of the industry weightings  
32 for the response and the functional area if different to the original posting. This will allow a tree of  
33 responses to develop where any branch of the tree may have a particular industry orientation with more  
34 industry specialists targeting a response. The model can have fees for responses to the postings made by  
35 the PCN and partly paid to respondents. However, this may not be necessary as, another model can use  
36 th desire of the participants to create a reputation to drive their interest providing inputs. The originator  
37 may provide inputs on the relevance of the responses in resolving the issue originally posted.

1                   These professional networks keep functioning to address specific queries of  
2                   members and may have economics of their own in providing incentives for respondents. However, in  
3                   addition they create a record of competence for each of the participants. This record can take many  
4                   forms depending on the structure that is created for the interaction and the definition of the threads of  
5                   discussion. Some examples are provided in the figures but they are by no means complete in terms of  
6                   such structures. When a new venture or other entity is contemplated by an entrepreneur or even a  
7                   existing entity that has job vacancies, such professional networks can be queried to provide the  
8                   competence record of the members.

9                   In the past such “references” came from a forward search among individuals  
10                  known to the originator of the search. Then to take advantage of the economies of scale in the  
11                  relationships in each field search firms were set up to use relationships that can be reused for new  
12                  relationships. Such search firms manifested themselves to some extent in Venture Capital Companies  
13                  that used relationships in their data banks to create economic value over and above the capital they  
14                  provided. The present invention provides a more powerful paradigm as both forward and backward  
15                  searches may be conducted in the networks and the infrastructure for transactions may even be designed  
16                  to provide the right parameters for measuring the performance of members when there is a search of a  
17                  new business entity conducted by an entrepreneur or a job posting for a company.

18                  In a similar vein there is a need for trust relationships or “personal references”  
19                  for generating new relationships in a business venture or for that matter in hiring decisions. The  
20                  structure of interactions in networks can be harnessed to provide key information in terms of the  
21                  relative strength of relationships such as derived from the frequency of interaction between members or  
22                  of interaction of members to groups that are responded to by other members. Such linkages can be  
23                  connected to get out a set of relationships with the Entrepreneur or other searching party (E) and then a  
24                  forward search from E conducted right through to the possibly several paths to the subjects of the  
25                  search. There can also be information on the nature of the relationships in the networks that are made  
26                  available.

27                  There is an issue of intrusion into privacy of the members. However, there can be  
28                  disclaimers designed for members on entry to allow such information to facilitate such processes that  
29                  such members can be beneficiaries of. For example, they could be paid by the PCN for allowing their  
30                  interactions to be used in a search.

31  
32  
33                  The above structure can be used as noted in a passive manner for a record of past actions of members of the PCN  
34                  to provide inputs in a search. In addition there can be active interactions of members on request by the PCN for  
35                  additional information or economic exchange. For example there can be referees at different levels as shown in  
36                  the figures for both the TL and the PL that can be paid by the PCN or another agent through the PCN. In  
37                  addition members who are knowledgeable about performance of members in a search may choose to provide  
38                  performance guarantees to the searching party through the PCN thereby providing greater confidence to the E.  
39                  Often such guarantees are more credible if underwritten by a credible financial institution. Such arrangements

1 and the guarantee arrangements along with legally binding agreements in the relevant jurisdictions and locations  
2 of the members for all economic transactions may be generated and executed by the PCN.

3  
4 The process of creation of a new venture by an E may start with the PCN providing a forum of Intellectual  
5 Property legal firms that offer services to the PCN member (potentially for a fee to the PCN). The E can then  
6 decide on one of these and then set up the IP requirements before creating a legal entity for operating the venture  
7 (such as a corporation or LLC etc) Again this can be done through a set of legal entities that provide such set up  
8 services in different jurisdictions available on the PCN (potentially for a fee to the PCN). Once the business plan  
9 is created by E (again resources for this can be provided through sets of consultants who execute non disclosures  
10 and operate through PCN for a fee as in the last two steps) , there is a need to find members of a team for the  
11 venture. The PCN provides the channels for posting requirements, bidding for the process and providing the  
12 diligence and then finalizing the arrangements (all for a fee which can include equity in the entity, wage based  
13 compensation or other claims on the economic value created by the transaction)

14 Initially the E posts the requirements for each participant in the intersection of the relevant industries and the  
15 relevant functional areas. Reservation equity or wages or other terms may be provided to be explicit or available  
16 only on meeting the conditions for reservation being met. The respondents bid with identities and any additional  
17 information they wish to provide and granting permission if they choose to allow E to go through a diligence  
18 process on PCN.

19 The E then may go through both a Trust evaluation and a Professional evaluation of the candidates. One or more  
20 Trust Layers (TL) that the respondent is a member are notified of the member's interest and references are  
21 solicited. Such referees are backward chained to second, third and higher level references till a known or trusted  
22 party is found as a referee at some nth level trusted by the E. This will then permit a forward chaining of  
23 verification of trust relationships in the paths to the respondent from the E. All members connected together by a  
24 chain of linkages between pairs of members are part of a connected network. Every unique path along linkages  
25 between pairs of members with no linkage traversed twice is a connection thread.

26 A parallel channel would be the utilization of the strength of communication relationships which may be  
27 established with the frequency of communication between members or other criterion related to the strength of  
28 relationships between members. Such communications may be backward chained till the E is reached and then  
29 then the E may choose to forward chain to verify the subject through the network. Notably, the communication  
30 network may be based on direct communications or communications to a sub network of any of the TL s and the  
31 response of other members to that communication.

32 Guarantees may also be provided for a fee with specific defined criteria that are triggers for payment.

33  
34 Similarly the diligence process for Professional performance may be conducted with the E viewing (potentially  
35 for a fee) a communications distribution of the subject in the space of industries and the space of functional areas.  
36 He may click or otherwise select a point or a region of the space to investigate the competence of the subject.  
37 Such a selection may give the postings that the subject has made in the local neighborhood of the selection ( the  
38 E can choose the size of the neighborhood) these postings will be classified in terms of the functional focus and  
39 industry focus and the context of each of these in terms of the trajectory of the prior and following postings in the

1 thread in these spaces. It may also give the position on the tree of communications following the initial posting  
2 for each of these communications, to establish the relevance ( early termination of a tree may be because an  
3 answer has been reached or because the branch has become irrelevant).

4 Further more the E can broadcast a request for referees that inhabit the neighborhoods that E has selected to  
5 provide references on the subject. PCN can provide a network of experts to evaluate the referees remarks or the  
6 subject.(for a fee. The experts may also be paid by PCN or be retained simply by generating a reputation for  
7 themselves) The bidder/subject will normally be informed of the request for references and the referees identities  
8 and be allowed to provide a perspective on that referee either positive or negative that is available to the E when  
9 evaluating the referee inputs.

10 There can be 2<sup>nd</sup> 3<sup>rd</sup> or higher order referees which can be evaluated by E or by experts. It is also possible to have  
11 first order referees to stay anonymous as long as they provide second order referees that evaluate them to  
12 disclose their identities. This arguen tmay be carried to multiple levels of anonymous referees.

13 There may also be a background process for establishing the reputation of referees in providing accurate inputs  
14 by correlating the positive references to positive decisions by E or in the case of multiple level referees the next  
15 higher level referee success in prediction (chained back from the success of the E)

16 Any of the referees can also provide guarantees as in the TL related to a specific predefined trigger criterion to  
17 help the E in a decision.

18 The E may then finalize decisions on the bidders and if necessary counter offer and receive responses any  
19 number of times through PCN and arrive at a decision possible after meeting with the bidders.

20 The PCN may get a fee based on economic value of the entity created that may be equity or other claim on the  
21 entity such as a senior claim as in preferred shares etc or simply contingent claims on performance  
22

23 The next step is to attract finance to the entity. Here again the PCN may have a forum of investors that may be  
24 Venture Capitalists or Angel investors etc. Upon request by E to the Financier, the Financier may initialize a  
25 diligence process on PCNs that he is a member of to check each of the participants. The process is analogous to  
26 the process conducted by E for theother participants.

27 PCN can charge a different fee for this service to capital providers.

28 A second factor for this stage of the process is that the E can use the information that he has got in the diligence  
29 process he has conducted to selectively present what he chooses to the financier.  
30